WORKING PROJECT TITLE	A traits-based approach to assessing potential climate change responses of alien species in Table Mountain and Reunion Island National Parks
SUPERVISORY TEAM	Prof. Tammy Robinson-Smythe (Stellenbosch University) Prof. Wendy Foden (SANParks) Prof. Mathieu Rouget (CIRAD) Dr Nicola van Wilgen-Bredenkamp (SANParks)
ACADEMIC LEVEL OF THE PROJECT	Post doc
PROJECT BACKGROUND	In recognition of the escalating impacts of climate change on biota, rapid developments have been made in the field of climate change vulnerability assessment (CCVA) in recent years. While approaches for assessing the vulnerability of native taxa are now well established, the potentially beneficial impacts of climate change on taxa have received far less attention. Such impacts can include increases in individual fitness, population size, distribution range and relative competitiveness. Understanding which species will benefit most is especially important in the context of alien species, particularly in areas where they already threaten indigenous biota. In recognition of this need, this exciting new project will develop and apply a trait-based approach to assessing the potential responses of alien species to climate change. Using protected areas in Reunion Island and South Africa as case studies, implementation will involve workshops and other consultation with a range of stakeholders including park managers, species experts, invasive species management experts and researchers.

Project results will be tailored and used directly to guide management decisions and further research priorities. While the initial work will focus on plants, the approach will be extended to animals with time. This work forms part of a large 3-year collaborative programme between Table Mountain and Reunion Island National Parks which seeks to advance research and management for the benefit of biodiversity, cultural heritage and tourism. The project involves scientists from both parks and is likely to require an exchange visit between the two parks.

ACADEMIC LEVEL OF THE PROJECT

Post doc

WHEN?

By April 2023

FUNDING

Two years of funding are available

REQUIREMENTS

PhD in ecology or another field relevant to understanding responses of biota to climate change (graduated in the last 5 years);

A strong publication record;

Good people skills and an ability to work within a diverse research team;

Experience with climate change vulnerability assessments (CCVA) or invasive plant ecology will be advantageous;

Willingness to travel to Reunion Island;

	Fluency in English Fluency French will be advantageous; Driven candidates with a keen interest in managing invasions in protected areas are encouraged to apply.
FURTHER READING	Bellard C et al. (2013) Will climate change promote future invasions? Global Change Biology 19: 3740-3748. https://onlinelibrary.wiley.com/doi/abs/10.1111/gcb.12344 Foden et al. 2019. Climate change vulnerability assessments of species. WIREs Climate Change 10:e551 https://doi.org/10.1002/wcc.551 Harper J et al. (2022) Application of a trait-based climate change vulnerability assessment to determine management priorities at protected area scale. Conservation Science and Practice. 4(8): e12756 https://doi.org/10.1111/csp2.12756 Hellmann JJ et al. (2008) Five potential consequences of climate change for invasive species. Conservation Biology 22: 534-543. Lee AT et al (2019) Reforesting for the climate of tomorrow: Recommendations for strengthening orangutan conservation and climate change resilience in Kutai National Park, Indonesia. Van Kleunen M et al. (2011) Research on invasive-plant traits tells us a lot. TREE 26: 317 https://doi.org/10.1016/j.tree.2011.03.019
KEY CONTACTS	Prof Tammy Robinson (trobins@sun.ac.za) When applying please include your CV, and a motivation for why you are suited to this position.